

Department of Justice Sustainable Buildings Implementation Plan



December, 2007

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Executive Summary

On January 24, 2007, President George W. Bush signed Executive Order (EO) 13423 “*Strengthening Federal Environmental, Energy, and Transportation Management*” that requires each Federal Agency to comply with the Guiding Principles set forth in the 2006 Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU). This Order set goals in the areas of acquisition, energy efficiency, renewable energy, water conservation, toxics reductions, recycling, electronics stewardship, fleets, and sustainable/high-performance buildings.

Subsequently the White House Council on Environmental Quality issued the “Instructions for Implementing EO 13423” on March 29, 2007. The Instruction stated that by August 15, 2007 and annually thereafter, each executive level agency or department shall submit a Sustainable Buildings Implementation Plan (SBIP) to the Office of Management and Budget (OMB). On June 29, 2007 the OMB issued the Sustainable Buildings Implementation Plan Guidance which provided detailed objectives, requirements and guidance to federal agencies for developing their Implementation Plans.

The Department of Justice (DOJ) Sustainable Building Implementation Plan (SBIP) addresses how DOJ will implement the following objectives:

- 1) Ensure all new facilities and major renovation projects implement design, construction, and operations and maintenance practices in support of the sustainable design/high-performance buildings goals of EO 13423, as well as, statutory requirements; and
- 2) Ensure that a minimum of 15 percent of the existing buildings that meet DOJ’s established criteria or target capital threshold incorporates the Guiding Principles in sustainable design practices by the end of fiscal year 2015.

With increasing concerns about limited resources, increasing fuel and energy costs, dependency on foreign oil, increasing world-wide energy demands, and climate change, using sustainable building practices has become a national priority.

This plan outlines the steps DOJ intends to take to fully comply with EO 13423’s implementing sustainable practices for high performance construction, leasing, operation, and maintenance of buildings. This plan will be incorporated as an appendix in the DOJ’s Real Property Asset Management Plan required by EO 13327, Federal Real Property Asset Management and will be updated annually.

1.0 INTRODUCTION

Buildings are major consumers of energy in this country. Sustainable building designs aim to lessen the negative impact on the environment through energy and resource efficiency. A sustainable building is defined as *the creation and responsible management of a healthy built*

environment based on resource efficient and ecological principles. Buildings that are healthy for the environment are healthy for people, as well.

DOJ joined several agencies in signing the Federal Leadership in High Performance and Sustainable Buildings MOU in January 2006. The MOU set goals and established *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles)* for agencies to follow when considering new construction or major renovation. The MOU *Guiding Principles* include:

- Employment of integrating design principles
- Optimization of energy efficiency and use of renewable energy
- Protection and conservation of water
- Enhancement of indoor environmental quality
- Reduction of environmental impacts of materials

Given the large inventory of buildings (over 3,000) that the Department owns and operates, it becomes essential that DOJ incorporate sustainable design strategies as it builds new facilities and renovates its existing ones. DOJ is committed to the goals of EO 13423 and the *Guiding Principles* of the MOU. This is not only a response to the environmental challenges posed by constructing, managing and operating buildings, but also a call to the government to lead by example that includes implementing guidance language from the following *E.O. 13423 Sections*:

2 (h) ensure that the agency when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product, enables the Energy Star feature on agency computers and monitors, establishes and implements policies to extend the useful life of agency electronic equipment, and uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.

3 (a) implement within the agency sustainable practices for energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction, renewable energy, including bioenergy, water conservation, acquisition, pollution and waste prevention and recycling, reduction or elimination of acquisition and use of toxic or hazardous chemicals, high performance construction, lease, operation, and maintenance of buildings, vehicle fleet management, and electronic equipment management;

3 (e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;

3 (f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the

agency's compliance with this order.

DOJ's vision is that by developing and executing a SBIP, the Department will strive to be part of the solution to the adverse environmental effects from not promoting energy-efficiency, water conservation, and sustainable building design in construction. Some of the results that the Department envisions as it execute the SBIP range from reduced life-cycle costs of facilities to improved energy efficiency to enhanced safety, health and productivity of DOJ employees. The SBIP is not intended to replace any existing policy but to augment such established policies using new metrics and reporting criteria, in accordance with EO 13423.

2.0 SCOPE

2.1 Purpose and Authority

The purpose of the DOJ's SBIP is to implement sustainable buildings principles and practices into the design, construction, operations and maintenance processes of buildings that DOJ owns and operates.

Executive Order 13423 "*Strengthening Federal Environmental, Energy, and Transportation Management*" requires that all executive agencies pursue the following objectives regarding sustainable buildings:

- Reduction in life-cycle cost of buildings environmental and energy attributes;
- Improvement in energy efficiency, water conservation, and utilization of renewable energy;
- Provision of safe, healthy, and productive built environments; and
- Promotion of sustainable environmental stewardship.

The DOJ's SBIP will facilitate: (a) the Department's compliance with sustainable building requirements in EO 13423, (b) reductions in energy and water consumption/related costs, and (c) enhancement of the health and increase in productivity of DOJ's employees.

2.2 Applicability

This SBIP applies to all Bureaus or Components and offices covered by the. The DOJ Real Property Asset Management Plan is updated periodically by the DOJ Justice Management Division and annually submitted to OMB.

2.3 Goals

The SBIP will help DOJ to accomplish the goals contained in section 2(f) of EO 13423, through the employment of integrated design principles, optimization of energy efficiency and use of renewable energy, protection and conservation of water enhancement of indoor environmental quality, and reduction of environmental impacts of materials in accordance with the Guiding Principles and other building and construction related E.O. 13423 goals and instructions.

Specifically:

- Ensure all new construction and major renovation of department buildings comply with the *Guiding Principles* set forth in the Federal Leadership in High Performance and Sustainable buildings MOU; and
- Ensure that a minimum of 15 percent of the existing buildings that meet DOJ's established criteria or target capital threshold incorporates the Guiding Principles in sustainable design practices by the end of fiscal year 2015.

2.4 Determining the 15% Threshold

The 2006 Federal Real Property Profile data report shows that the Department of Justice (DOJ) has 4,363 real property assets. These assets include 161 parcels of land, 3,821 buildings, and 381 structures. DOJ decided to consider only those assets that fall under the following conditions in determining which inventory threshold would be applicable to the 15% of the existing buildings that will be targeted to incorporate sustainable Guiding Principles by 2015:

1. Existing buildings with a replacement value of at least one million dollars.
2. Buildings with a 2006 Facility Condition Index (FCI) rating of 85% or less.

The FCI rating provides the current condition assessment of buildings. High FCIs (86% - 100% range) are rated excellent to good condition buildings. Majority only require minimum maintenance and have near zero programmed repairs or renovations. Most of the new buildings have high FCI index ratings.

Buildings with 85% and lower FCIs are considered medium to poor condition buildings. Most of these are less energy efficient buildings, some require more repair and maintenance and some require major renovations which increases the opportunity of incorporating Sustainable Guiding Principles in planning and design.

This would increase the energy efficiency of older and larger buildings.

2.5 Calculations

(a). Using the *Sustainable Principles Target Buildings List (Attachment 1)*, figures taken from the 2006 Federal Real Property Profile data report, determine the buildings with one million dollars or more in replacement value:

Total Number of Buildings = 2,023
Total Gross Square Foot = 63,119,075 SF
Total Real Property Value = \$ 13,499,948,395

(b). Determine the target Buildings Threshold or maximum number of buildings planned for Sustainable Guiding Principles implementation:

Buildings Threshold = Existing Buildings with 85% and below FCI ratings = 305 buildings

Total Gross Square Foot = 8,813,891 SF

2006 Real Estate Value = \$ 1,949,046,063

(c). Determine 15% of the target Buildings Threshold or minimum number of buildings to attain Sustainable Guiding Principles by 2015:

Minimum Targeted Buildings = 15% of (existing buildings with 85% and below FCI and value of at least one million dollars) = 15% of 305 = 50 Buildings

Total Gross Square Foot = 15% of 8,813,891 SF = 1,322,084 SF

Total Real Property Value = 15% of \$ 1,949,046,063 = \$ 292,356,910

3.0 CURRENT SUSTAINABLE PROGRAMS

The DOJ has already begun to implement sustainability measures for its facilities. In the past year, the FBI and the BOP, which represent most of the DOJ owned buildings, have issued their own sustainable building implementation plans that include goals of energy and water conservation, LEED® certification for new buildings, increasing the use of recycled products, and acquiring renewable sources of energy, among others. The Justice Property Management Regulations also include guidelines for implementing energy conservation policies and regulations for all DOJ controlled facilities.

As a result of DOJ sustainable building efforts, the Department has achieved a number of accomplishments in Fiscal Year 2006. For example, DOJ has reduced energy intensity (MBTU/SF) by 9% from 2003 baseline, BOP funded and completed 86 facility energy audits, and completed a DOJ Metering Plan. In addition, the BOP Butner III facility in North Carolina achieved LEED® Certification and the FBI's Northern Virginia Resident Agency is seeking LEED® Silver level and Energy Star certifications for a new building construction.

DOJ has already taken initial steps to accomplish these goals such as, adopting policies and memorandums that promote energy-efficiency, water conservation, and sustainable building design and construction. DOJ has also chartered an Energy Program Management Team chaired by the DOJ Facilities Director and staffed by headquarters personnel and Bureau energy managers from: Alcohol Tobacco and Firearm (ATF), Bureau of Prisons (BOP), Drug Enforcement Agency (DEA), Federal Bureau of Investigation (FBI), and U.S. Marshals Service (USMS). The DOJ Energy Program Management Team will provide advice, technical expertise, and recommendations in formulating methods for tracking, status reporting, and accomplishments to achieve the desired energy goals.

In addition, the DOJ has an existing Environmental Working Group that will assist in ensuring sustainable building practices are incorporated into all stages of a building's construction and lifecycle maintenance.

4. IMPLEMENTATION PLAN ACTION ITEMS

ACTION ITEM	TARGET COMPLETION DATE	ACTUAL COMPLETION DATE
Programming and Implementation		
<p>1. Develop Sustainable Building Implementation Plan and Design/Green Policy.</p> <p>-Comply with the <i>Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings</i> set forth in the Federal Leadership in High Performance and Sustainable Buildings MOU.</p>	August 2007	
<p>2. Perform analysis to determine applicable building projects.</p> <p>- Evaluate the agency's list of owned and leased inventory buildings assets to create a capital threshold to determine which buildings would be applicable to the 15% of existing building inventory threshold that will be targeted to incorporate the sustainable <i>Guiding Principles</i> by 2015.</p> <p>- Summarize the total number of building assets and the aggregate gross square footage associated with the buildings, total number of buildings above the capital threshold and the aggregate gross square footage associated with those buildings, and total number of buildings below the capital threshold and the aggregate gross square footage associated with those buildings.</p> <p>- Comply with current asset management plan and to be revised annually, as appropriate.</p>	November 2007	

<p>3. Develop the process of implementing sustainable design principles.</p> <ul style="list-style-type: none"> - Assign staff or integrated teams to develop the process flow. Identify a cross functional team (procurement, legal, budget, facility, energy, environment, fleet vehicle management and technical support) responsible for decision-making directly related to the implementation of the agency's plan. - Integrated process teams to analyze and develop procedures to employ sustainable design at the earliest stages of project planning (i.e., pre-funding, conceptual design) for all the capital asset projects involving new constructions, build-to-lease, and/or major renovations in order to address the <i>Guiding Principles</i>. - Depending on project size and scope, these teams should have expertise in sustainable, energy, environment, and water efficiency design principles. It is expected that these integrated teams will include both federal and non-federal (within the contracted project team) staffing. - Develop semi-annual system for reporting agency progress towards addressing the <i>Guiding Principles</i> in all building life cycle stages: <ul style="list-style-type: none"> • Siting • Design • Construction • Operations & maintenance • Renovation • End of life 	March 2008	
<p>4. Begin semi-annual reporting of Agency progress toward incorporating the <i>Guiding Principles</i> in all building life cycle stages (Siting, Design, Construction, Operations & Maintenance, Renovation, and End of Life).</p>	June 2008	
<p>5. Modify all pertinent DOJ policies to incorporate <i>Guiding Principles</i>.</p> <ul style="list-style-type: none"> - Perform a "gap analysis" or assessment of current policies, programs, criteria, contracts, specifications, training and other areas identifying gaps in the agency's sustainable building program. - Provide outlines how the agency will ensure that all new facilities and renovation projects implement design, construction, and maintenance and operation practices in support of the sustainable design/high performance buildings goals of E.O. 13423. - Provide outlines how the existing facilities' maintenance and 	June 2008	

<p>operation practices support of the goals of E.O. 13423.</p> <ul style="list-style-type: none"> - Address regional factors and focus areas where initiatives can be adapted to local conditions. - The implementation plan shall prioritize and address any corrective actions. 		
<p>6. Create a strategy for promotion of the plan to the field by education and training.</p> <ul style="list-style-type: none"> - Provide awareness training to introduce <i>Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings</i>. - Extend commissioning to training of operations and management staff. Clearly define these expectations in contract language. - Develop an approach for addressing regional factors and focus areas where initiatives can be adapted to local conditions. 	July 2009	
<p>7. Create a strategy for addressing sustainable buildings in capital planning and budgeting per OMB Circular A-11 Part 7 Section 300 -Planning, Budgeting, Acquisition, and Management of Capital Assets</p> <ul style="list-style-type: none"> -Develop a procedure to incorporate the <i>Guiding Principles</i> in all business cases developed per OMB A-11 Part 7 Section 300. 	July 2008	
<p>8. Establish specific sustainability performance targets for meeting goals in the <i>Guiding Principles</i>.</p> <ul style="list-style-type: none"> - Define the unit of measurement for tracking/reporting agency progress (# of certified buildings, etc.). - Establish a baseline for energy use, water use, and other goals per the <i>Guiding Principles</i>. - State a clear, quantifiable, and achievable vision which is clearly communicated to all agency personnel. - Create prioritized series of initiatives to secure the greatest return on investment. 	August 2008	
<p>9. Establish a procedure to incorporate the <i>Guiding Principles</i> into criteria, leases, contract language, designs, and specifications for new construction, build-to-lease, and major renovations and ultimately into existing building operation and</p>	September 2008	

<p>maintenance.</p> <ul style="list-style-type: none"> - The procedures should allow for and encourage continual improvement (<i>Note: consider utilizing the WBDG Federal Green Construction Guide for Specifiers</i>) 		
<p>10. Establish a strategy for communication of the plan to the authority with jurisdiction to incorporate plan/goals into their services.</p> <ul style="list-style-type: none"> - Create template real estate agreements or Memorandum of Agreements (MOA) to be used by building property officials and senior management to demonstrate commitment to the <i>Guiding Principles</i> - Establish definitions and assignment of responsibilities for: 1) functional relationships in the decision-making process; 2) key players; and 3) the chain of command in establishing the commitment for the approval process. - Provide matrix for measuring compliance with established mandates, goals, targets, and score cards. 	December 2008	
<p>11. Commence project execution and tracking.</p> <ul style="list-style-type: none"> - Develop an Existing Building Strategy—which identifies priority facilities and environmental aspects (including energy use, and IEQ), addresses minor renovations, and utilizes recommissioning as a tool—in order to identify and implement opportunities to incorporate the <i>Guiding Principles</i> into the existing building stock. - Establish procedures or tools (e.g. EMS) to identify and track new construction, build-to-lease, and major and minor renovation projects and determine if the <i>Guiding Principles</i> were incorporated into criteria, lease, contract language, design, specification, and ultimately into existing building operation and maintenance. - Institute measurement, verification, and training to ensure continual improvement. Clearly define how the Measurement and Verification will be used. - Start sustainable design project execution. Report the success and lessons learned for at least one major building project into High Performance Federal Buildings database (www.eere.energy.gov/femp/highperformance/index.cfm) 	December 2008 - September 2015	
<p>12. Commence field personnel training on sustainable design principles.</p>	December 2008 - April 2009	

13. Establish a procedure on how the Sustainable Buildings Program is being coordinated with the EMS and asset management plan.	December 2008	
14. Develop a strategy to address sustainability opportunities for those buildings that agencies have determined “Not Applicable” to all of the 5 <i>Guiding Principles</i> .	July 2010	

5. ATTACHMENTS

Attachment 1 - Sustainable Principles Buildings List

Attachment 2 - Department of Justice Sustainable Building Implementation Plan Actions Chart